

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Allowed) A method comprising:
 computing a plurality of random noise samples;
 storing the plurality of random noise samples in a lookup table;
 detecting for a voice activity in a signal; and
 if the voice activity is not detected, encoding a first data frame of the signal to create a first non active voice frame, including
 generating a first excitation based on the plurality of random noise samples of the lookup table, and
 generating the first non active voice frame based on a scale factor and the first excitation; and
 after encoding the first data frame of the signal, reusing the already generated first excitation to encode each subsequent data frame of the signal until a voice activity of the signal is detected, each encoding of a respective subsequent data frame of the signal including
 altering the scale factor based on any change in a noise condition of the signal, and
 generating a respective non active voice frame based on the scale factor and the already generated first excitation of the first data frame.
2. (Allowed) The method of claim 1 further comprising padding an excitation with zeros if a gain of a frame of the non active voice signal is zero.

3. (Allowed) The method of claim 2 further comprising generating random adaptive codebook parameters and fixed codebook parameters.
4. (Allowed) The method of claim 3 wherein generating the first excitation includes:
 - generating a random adaptive excitation based on the random adaptive codebook parameters;
 - computing a sum of the random adaptive excitation and one of the random noise samples; and
 - rescaling the sum of the random adaptive excitation and one of the random noise samples.
5. (Allowed) The method of claim 4 wherein generating the first excitation further includes:
 - computing a fixed codebook gain based on the fixed codebook parameters; and
 - updating the rescaled excitation with an algebraic-code-excited linear-prediction excitation.
6. (Allowed) The method of claim 1 wherein the random noise samples are Gaussian noise samples.
7. (Currently Amended) A storage medium comprising content, which when executed by an accessing machine, causes the accessing machine to implement a method comprising:
 - computing a plurality of random noise samples;
 - storing the plurality of random noise samples in a lookup table;
 - detecting for a voice activity in a signal; and

if the voice activity is not detected, encoding a first data frame of the signal to create a first non active voice frame, including

generating a first excitation based on the plurality of random noise samples of the lookup table, and

generating the first non active voice frame based on a scale factor and the first excitation; and

after encoding the first data frame of the signal, reusing already generated first excitation to encode each subsequent data frame of the signal until a voice activity of the signal is detected, each encoding of a respective subsequent data frame of the signal including

altering the scale factor based on any change in a noise condition of the signal, and [[and]]

generating a respective non active voice frame based on the scale factor and the already generated first excitation of the first data frame.

8. (Allowed) The storage medium of claim 7, the method further comprising padding an excitation with zeros if a gain of a frame of the non active voice signal is zero.

9. (Allowed) The storage medium of claim 8, the method further comprising generating random adaptive codebook parameters and fixed codebook parameters.

10. (Allowed) The storage medium of claim 9 wherein generating the first excitation includes:

generating a random adaptive excitation based on the random adaptive codebook parameters;

computing a sum of the random adaptive excitation and one of the random noise samples; and

rescaling the sum of the random adaptive excitation and one of the random noise samples.

11. (Allowed) The storage medium of claim 10 wherein generating the first excitation further includes:

computing a fixed codebook gain based on the fixed codebook parameters; and
updating the rescaled excitation with an algebraic-code-excited linear-prediction excitation.

12. (Allowed) The storage medium of claim 7 wherein the random noise samples are Gaussian noise samples.

13. (Currently Amended) An apparatus comprising:

an encoder coupled to a communication channel wherein the encoder is to compute a plurality of random noise samples and to store the plurality of random noise samples in a lookup table, the encoder further to encode, if a voice activity is not detected in a signal, a first data frame of the signal to create a first non active voice frame, wherein the encoder is

to generate a first excitation based on the plurality of random noise samples of the lookup table, and

to generate the first non active voice frame based on a scale factor and the first excitation,

the encoder further to reuse the already generated first excitation after encoding the first data frame of the signal to encode each subsequent data frame of the signal until a voice activity of the signal is detected, wherein for each encoding of a respective subsequent data frame of the signal the encoder is

to alter the scale factor based on any change in a noise condition of the signal,

and

to generate a respective non active voice frame based on the scale factor and the already generated first excitation of the first data frame; and
a voice activity detector coupled to the encoder to detect for a non active voice signal[[;]].

14. (Allowed) The apparatus of claim 13, the encoder further configured to pad an excitation with zeros if a gain of the signal is zero.

15. (Allowed) The apparatus of claim 14, the encoder further configured to generate random adaptive codebook parameters and fixed codebook parameters.

16. (Allowed) The apparatus of claim 15, wherein generating the first excitation includes:

generating a random adaptive excitation based on the random adaptive codebook parameters;

computing a sum of the random adaptive excitation and one of the random noise samples; and

rescaling the sum of the random adaptive excitation and one of the random noise samples.

17. (Allowed) The apparatus of claim 16, wherein generating the first excitation further includes:

computing a fixed codebook gain based on the fixed codebook parameters; and
updating the rescaled excitation with an algebraic-code-excited linear-prediction excitation.

18. (Canceled).

19. (Allowed) The apparatus of claim 13 wherein the random noise samples are Gaussian noise samples.

20. (Currently Amended) A storage medium containing content which, when executed by an accessing machine, causes the accessing machine to generate:

an encoder coupled to a communication channel wherein the encoder is to compute a plurality of random noise samples and to store the plurality of random noise samples in a lookup table, the encoder further to encode, if a voice activity is not detected in a signal, a first data frame of the signal to create a first non active voice frame, wherein the encoder is

to generate a first excitation based on the plurality of random noise samples of the lookup table, and

to generate the first non active voice frame based on a scale factor and the first excitation,

the encoder further to reuse the already generated first excitation after encoding the first data frame of the signal to encode each subsequent data frame of the signal until a voice activity of the signal is detected, wherein for each encoding of a respective subsequent data frame of the signal the encoder is

to alter the scale factor based on any change in a noise condition of the signal, and

to generate a respective non active voice frame based on the scale factor and the already generated first excitation of the first data frame; and

a voice activity detector coupled to the encoder to detect for the non active voice signal[[] ; []].

21. (Allowed) The storage medium of claim 20, the encoder further configured to pad an excitation with zeros if a gain of a frame of the non active voice signal is zero.

22. (Allowed) The storage medium of claim 21, the encoder further configured to generate random adaptive codebook parameters and fixed codebook parameters.

23. (Allowed) The storage medium of claim 22, wherein generating the first excitation includes:

generating a random adaptive excitation based on the random adaptive codebook parameters;

computing a sum of the random adaptive excitation and one of the random noise samples; and

rescaling the sum of the random adaptive excitation and one of the random noise samples.

24. (Allowed) The storage medium of claim 23, wherein generating the first excitation further includes:

computing a fixed codebook gain based on the fixed codebook parameters; and

updating the rescaled excitation with an algebraic-code-excited linear-prediction excitation.

25. (Canceled).

26. (Allowed) The storage medium of claim 20 wherein the random noise samples are Gaussian noise samples.

Claims 27 - 40. (Canceled).